

REMARKS

Summary of Interview

On August 16, 2005, the inventors and the undersigned attorney conducted a telephonic interview with Examiner Peggy Neils. Applicants thank the examiner for attending the interview and discussing the instant application. Applicants discussed the pending independent claims 1, 23, 36, and 51, the prior art cited by in the most recent Office Action, and a comparison of the claims versus the cited prior art. Applicants and Examiner did not reach agreement regarding patentability of the claims over the cited prior art.

Office Action mailed May 20, 2005

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-63 were pending prior to this response. Claims 1-19, 21, 23-48, and 50-62 stand rejected. Claims 20, 22, 49 and 63 have been objected to.

Claims 1-5, 7, 9-16, 18-20 and 22 have been amended. Claims 23-63 have been cancelled. Claims 64-73 have been added. Support for the amendments and new claims is found in the specification, the drawings, and in the claims as originally filed. Applicants submit that the amendments and new claims do not add new matter.

Rejections Under 35 U.S.C. 102(b)

Claims 1-4, 6-12, 15, 18, 19, 23-29, 34-42, 45, 48, 50-56, 59 and 62 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,800,035 of Aichele ("Aichele").

The Office action states that

Aichele shows an illuminated vehicle wheel which includes at least one light source 26 positioned in the center of the wheel on a protruding hub 28. The light source is shielded b[y] a cap 74 which preferably has a reflective surface at 76. Light from the light source enters light conducting portion (projector) 90 which functions as a fiber optic conductor (see col. 6, line 16). The disclosure states that light is emitted in a predetermined pattern adjacent wheel 12. Light conducting member is readable as a waveguide.

(p. 2, Office Action 052005)

Claims 23-29, 34-42, 45, 48 50-56, 59 and 62 have been canceled without prejudice. Rejection of these claims, therefore is moot. However, Applicant respectfully submits that claims 1-4, 6-12, 15, 18, 19, as well as new claims 64-73 are not anticipated by Aichele. In particular, with respect to claim 64, the following highlighted limitation is not disclosed in Aichele:

Claim 64. A wheel lighting assembly, comprising:
a light source to provide light;
a structural element in to which to mount the light source, **the structural element to allow a portion of the provided light to be directed to and reflected from the surface of a wheel and to minimize any remaining portion of the light from being directly visible by an observer...**

(emphasis added)

Aichele relies on fiber optic technology to transmit light through plastic or glass. Light enters optically transmitting plastic (a “light transmitting member”) through one end (the “light receiving portion”) and is transmitted through the plastic (the “light conducting member”) away from that end. The sides of the plastic are polished so that the plastic operates as a waveguide and the light travels through the plastic to the other end. **The other end of the plastic is not polished so that light passes through it** (the “light emitting portion”) **and is visible to the observer.** Aichele, col. 1, lines 23-34.

Aichele further discloses that the light emitting portion of the plastic receives light from the light conducting portion of the plastic and **emits that light in a pattern adjacent to the wheel.** Aichele, col. 2, lines 25-33. Again, Aichele discloses that the lighting system **provides light which is visible from the side.** Aichele, col. 3, lines 13-17. Thus, Aichele repeatedly discloses emitting light that is adjacent to the wheel, and visible to an observer. In contrast, Applicant’s claim 64 recites **directing light to and reflecting light from, from the surface of a wheel and minimizing any remaining portion of the light from being directly visible by an observer.**

In col. 6, lines 39-45, Aichele discloses a component of light emitted radially outwardly (that is, not directed to nor reflected from a surface of a wheel) and a component of light emitted

axially, from the light emitting surface 98. Aichele states that a part of the axial component of light is emitted toward the rim and therefore illuminates the rim but that the other part of **the axial component of light is emitted away from the rim and is visible to the observer** at the side of the vehicle as a circle of light. Thus, Aichele discloses two components of emitted light – a radial component which is not directed to nor, therefore, reflected from, the surface of the wheel, and an axial component, only a portion of which allegedly directs any light towards the wheel. Aichele’s disclosure, then, is in direct contrast with Applicant’s claim limitation of **a structural element to allow a portion of the provided light to be directed to and reflected from the surface of a wheel and to minimize any remaining portion of the light from being directly visible by an observer**. Not only is a portion of Aichele’s axial component of light emitted away from the wheel, and therefore directly visible by an observer as a “circle of light”, but in addition, Aichele’s radial component of light is emitted radially outwardly. The wheel lighting apparatus disclosed in Aichele makes no attempt at minimizing light from being directly visible by an observer. In fact, Aichele touts the fact that emitted light is visible to an observer as a safety feature of the disclosed wheel lighting apparatus. Aichele, col. 1, lines 35-42. Based on at least these distinctions between the disclosure in Aichele and at least the above mentioned limitation of claim 64, Applicant contends the claim is patentable under 35 USC 102(b) over Aichele.

Claim 1, the only other independent claim now pending, recites:

- a light source; and
- a means for positioning the light source within a rotating reference frame of a wheel, such that an amount of light from the light source reflected from a surface of the wheel is greater than an amount of light from the light source directed away from the surface of the wheel.

Thus, claim 1 is limited to a light source that directs sufficient light to the surface of the wheel so that more light is reflected from the wheel than directed away from the surface of the wheel. In contrast, the light source in Aichele, which the reference states is “the light emitting portion [96]” of light transmitting member 68 (Aichele, col. 2, line 38), generates more light directed away from the surface of the wheel than reflected from the surface of the wheel. In particular, the light emitted radially outwardly from light emitting portion 96, as well as the axial component of light emitted from light emitting

portion 96 away from the rim, is directed away from the surface of the wheel, while only the axial component of light emitted from light emitting portion 96 toward the rim is potentially reflected from the surface of the wheel.

Moreover, if the Office takes the position that the light bulb 26 in chamber 22 is the light source, Applicant contends claim 1 is likewise patentable since, in direct contrast to the limitation recited in claim 1, the amount of light from the light bulb reflected from a surface of the wheel is *less than* the amount of light from the light source directed away from the surface of the wheel. It is important to understand here that except for light in the chamber that is transmitted outside the chamber via light transmitting member 68, the chamber in Aichele prevents transmission of light, whether directed away from the surface of the wheel or reflected from the surface of the wheel. See Aichele, col. 5, lines 33-36, wherein the reference states, “In addition, the balance of the chamber 22 or chamber portion 93 is formed from material which prevents the transmission of light therethrough and contains the light in the chamber.” Again, Aichele states, at col. 6, lines 4-7, “With the exception of the light receiving surface 72 [of light transmitting member 68] the balance of the inner surface or chamber portion 93 of the chamber 22 blocks light passing therethrough ...” Since the light blocked by the chamber in Aichele necessarily is not emitted from the chamber, Applicant’s contend the blocked light from light bulb 22, that is, the light prevented by the chamber material from being transmitted, cannot reasonably be considered as light from the light bulb that is reflected from a surface of the wheel, or for that matter, as light from the light bulb directed away from the surface of the wheel. Since the light prevented from being transmitted from the chamber necessarily cannot be either reflected or directed away from the surface of the wheel, Aichele in this regard also fails to teach at least the limitation in claim 1 of means for positioning the light source within a rotating reference frame of a wheel, such that an amount of light from the light source reflected from a surface of the wheel is greater than an amount of light from the light source directed away from the surface of the wheel.

Claims 2-4, 6-12, 15, 18, and 19 depend on claim 1. Claims 65-73 depend on claim 64. Thus for that least the same reason that claims 1 and 64 are patentable under 35 USC 102(b) over Aichele, Applicant's likewise contend claims depending thereon are patentable.

Rejections Under 35 U.S.C. § 103(a)

Claims 5, 13, 14, 16, 17, 30-33, 43, 44, 46, 47, 57, 58, 60, and 61 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No., 5, 800, 035 of Aichele ("Aichele").

The Office action states that

To coat the surface of the wheel is a design choice depending on the material of the wheel and how much natural reflection is provided by the surface. The prior art shows many arrangements for lighting on a wheel. To orient the lighting system differently would depend on the desired lighting appearance and would not affect the operation of the device.

(p. 3, Office Action)

As an initial matter, claims 30-33, 43, 44, 45, 47, 57, 58, 60 and 61 are canceled. Therefore, the rejection of these claims is moot. As for claims 5, 13, 14, 16, and 17, these claims depend on claim 1, and are therefore, patentable under 35 USC 103(a) for at least the same reason claim 1 is patentable over the Aichele. Applicants respectfully submit that new claims 64-73 are not obvious under 35 U.S.C. § 103 in view of Aichele for at least the same reasons as set forth above with respect to the response to the rejection of the claims under 35 USC 102(b).

Claims 1 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Dai. However, the Office fails to provide any further information about the reference, for example, whether the reference is a US patent, and if so the US patent number. Moreover, the Office action fails to provide sufficient specificity as to the basis for the rejection of claims 1 and 21 in view of Dai. Claim 21 has been canceled, so the rejection of that claim is moot. However, with respect to claim 1, and to the extent Dai may be material to patentability of new claim 64, the Applicant respectfully contends that applicant is unable to provide a response to this rejection,

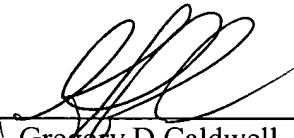
and requests the Office to provide further information in order for the Applicant to properly respond, if necessary.

It is respectfully submitted that in view of the amendments and arguments set forth herein, the applicable rejections and objections have been overcome. If there are any additional charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully submitted,

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